



Safe Drinking Water Act Assessment Program **Annual Report to the Massachusetts Legislature** **For January – December 2017**

24th Year of the Assessment Program

Introduction

In 1993, the Massachusetts Legislature established the Safe Drinking Water Act (SDWA) Assessment and a SDWA Assessment Advisory Committee to monitor MassDEP's Assessment Program. Each year, the SDWA Assessment Advisory Committee is required to submit an update to the Legislature in the form of an Annual Report. The following is the Annual Report for calendar year 2017, which provides an overview of the Assessment Program and the Advisory Committee, and provides highlights of program activities.

Overview of the Safe Drinking Water Act Assessment Program

The Safe Drinking Water Act Assessment is paid each year by the 6.2 million consumers of public water and is collected by the 1,668 public water systems (PWSs) in Massachusetts. The average cost to each customer is about 32 cents per year. The Assessment provides funds to the Massachusetts Department of Environmental Protection's (MassDEP) Drinking Water Program to maintain primacy for the federal SDWA. Primacy means that the SDWA is implemented by MassDEP, including all enforcement responsibilities, instead of by the federal government.

By maintaining primacy, MassDEP ensures the safe production of drinking water at PWSs while implementing state-specific programs that save consumers millions of dollars. Just one SDWA program administered by the Drinking Water Program, the Monitoring Waiver Program, is saving consumers \$4,712,914 in water quality monitoring costs for the 2017-2019 cycle. The Assessment is also used as a state match for federal funds for the Drinking Water State Revolving Fund Set Aside Program, which provides significant technical assistance and grants to PWSs.

The current Assessment rate is \$8.50 per million gallons of water used. The minimum bill issued to a PWS is \$20.00. Approximately half of the 1,668 PWSs in Massachusetts pay the minimum \$20.00 bill. Assessment revenue for fiscal year 2017 was \$1,924,489. A summary of work completed at MassDEP in 2017 with Assessment funds is included at the end of this report.

The Safe Drinking Water Act Assessment Advisory Committee

In 1993, as part of the Assessment Program, the legislature formed a Safe Drinking Water Act Assessment Advisory Committee to: 1) recommend an annual Assessment rate to MassDEP's Commissioner; 2) monitor and audit the Assessment Program; 3) produce an annual report to the legislature; and 4) conduct public meetings. The members of the Committee also provide advice and recommendations on the Drinking Water Program's technical and compliance assistance and outreach programs to public water suppliers and others.

The Committee supports the use of Assessment funds by the Drinking Water Program and recommends higher staffing levels, should more funding be available, to improve upon programs to protect public health and support public water systems with their essential work. For more information about the Assessment Program or the Committee's work, contact MassDEP's Drinking Water Program at 617-292-5770, or program.director-dwp@state.ma.us.

MassDEP Priority Drinking Water Work in 2017

The Drinking Water Program oversees approximately 50 SDWA rules and programs. Priorities for the Program include transparency of public health information, timely availability of water quality testing results and meaningful compliance assistance and training for public water suppliers. Examples of work that are consistent with these priorities are described below.


1. Working Cooperatively with USEPA and PWSs on Lead and Copper Rule Implementation

MassDEP has been working closely and cooperatively with EPA on the current Lead and Copper Rule (LCR) to maximize public health protection benefits. Among the agency's important LCR actions are:

- The development of an informational survey for PWSs relative to their lead service lines (LSLs) actions and consumer communications and transparency. This survey helped water systems to estimate existing LSLs locations and/or identify gaps in their information.
- After each LCR monitoring round, all PWSs now receive a user friendly, comprehensive status and action plan that guide any and all follow-up actions.
- MassDEP continued to work diligently with PWSs that exceed the Lead Action Level (ALE) to ensure that they conduct all the required follow-up actions. The list of the PWSs with ALEs is posted on MassDEP's website at <https://www.mass.gov/files/documents/2016/08/wk/pb90.csv>.
- The agency has updated all the LCR program materials for PWSs and has provided statewide LCR training for all PWSs subject to the rule.
- MassDEP has expanded DW State Revolving Fund eligibility to allow PWSs who are rehabilitating water mains to include as part of the loan the cost to fully replace any encountered lead service lines (LSL), including the privately-owned portion of the LSL, up to the water meter.

2. Assistance Program for Lead in School Drinking Water

As reported in last year's Annual Report, in April 2016, Governor Charlie Baker and State Treasurer Deb Goldberg provided \$2.75 million to launch a cooperative program to help Massachusetts public schools and public childcare facilities voluntarily test for lead and copper in drinking water. Under this ground-breaking program, the Massachusetts Department of Environmental Protection (MassDEP), University of Massachusetts – Amherst, the Massachusetts Water Resources Authority (MWRA), and other partners provided technical assistance to public schools and childcare facilities to establish a lead and copper in drinking

water program. Technical assistance included: helping public schools and childcare facilities to establish an ongoing program, providing lab analysis of samples taken at taps and water fountains used for drinking and cooking, assisting with the identification of fixtures with lead and copper concentrations over Massachusetts' lead and copper Action Levels, and providing guidance on possible remedial actions. Results from the 2016/2017 School Year are available in a May 2, 2017 report: [Final Report of Massachusetts Assistance Program for Lead in School Drinking Water - May 2017](#) 

For the 2017/2018 school year, MassDEP and the other program partners are continuing to provide free sampling and technical assistance for public schools and childcare facilities that did not previously participate in the program. Under the 2017/2018 program, head start and special education programs are included in order to help reach these vulnerable populations. For schools and childcare facilities that wish to conduct or continue programs on their own, or do not qualify to participate in the program, MassDEP has published a comprehensive user-friendly on-line guide and tutorial. These materials are available at <https://www.mass.gov/lists/lead-in-drinking-water>. School officials and others with questions may contact MassDEP's Drinking Water Program by email at program.director-DWP@state.ma.us.

3. New Environmental Data and Public Information Access System, including Public Access to SDWA Compliance Data

In August 2017, the Baker-Polito Administration launched the first phase of a transformative environmental data and public information access system. The new system delivers online permitting, greater data accessibility, and provides increased transparency in state government operations for businesses and stakeholder groups across the Commonwealth and the public at-large. The Energy and Environmental Information and Public Access System (EIPAS) provides the Executive Office of Energy and Environmental Affairs (EEA) and its agencies with a modern, digital platform to more efficiently and effectively execute its mission of protecting the Commonwealth's environmental and energy resources. The first phase in 2017 established online permitting for 30 permits, including air quality, hazardous waste, solid waste, toxic use reduction, special use permits, pesticides, and water supply cross-connections. The Information Data Portal portion of the new system relies heavily on Safe Drinking Water Act compliance data processed by Drinking Water Program staff funded by the Assessment. The Information Data Portal's initial release includes 20 years of MassDEP's permit, inspection, facility and enforcement data, providing both data query and analytical dashboard capabilities. The data portal is a work in progress and is available at <https://eeaonline.eea.state.ma.us/portal#!/home>.

4. Training Videos for Public Water Suppliers

Drinking Water Program staff continue to create new on-line training videos which are posted at <https://goo.gl/Xhw4br>. Drinking Water Program staff consult with public water suppliers about training topics that are the most useful to address PWS greatest challenges. Over 5,550 views of the videos have been counted since the first training video was posted in 2015. In 2017, the following drinking water training videos were produced and added to the selection:

- Lead in School Drinking Water – Technical Assistance Program;
- Revised Total Coliform Rule;
- Revised Total Coliform Rule – Lessons Learned;
- PWS Seasonal Start-ups;
- Chlorate Mitigation Control;
- Source Water Protection – Wildlife Impacts; and
- MassDEP Approval to Acquire or Release Water Supply Land.

5. Communication Network with Public Water Suppliers and Other Partners

Bi-weekly emails from the Program Director deliver updates on regulations and new trainings, reminders about reporting, emergency alerts and articles of interest to public water systems, Boards of Health and other water supply partners. You may sign up to receive these messages by emailing program.director-dwp@state.ma.us and typing *sign up for emails* in the subject line.

Members of the Safe Drinking Water Act Assessment Advisory Committee – 2018

The following list provides the name, organization represented, affiliation, and year of appointment for the members of the Safe Drinking Water Act Assessment Advisory Committee.

- Neal Merritt, Chair, *Rural Water Systems*, Plymouth County Water Works Association, 2008
- Elizabeth Ainsley Campbell, Vice Chair, an *Environmental Agency*, Nashua River Watershed Association, 2002
- David Condrey, a *Non-profit Association Representing Investor-owned Water Companies*, National Association of Water Companies, 2011
- Thomas Holder, a *New England Regional Water Works Association*, New England Water Works Association, 2013
- David Masciarelli, an *Environmental Agency*, Canoe River Aquifer Advisory Committee, 2013
- Paul McGovern, an *Organization Representing Non-Community Water Suppliers*, Small System Contract Operator, 2014
- Blake Lukis, a *Massachusetts Statewide Water Works Non-Profit Association*, Massachusetts Water Works Association, 2015
- Sean Osborne, an *Organization Representing Industry*, OSD Environmental Services LLC, 2015
- Rebekah McDermott, a *Regional Water Works Association*, Western Mass. Water Works Assoc., 2016
- Victoria Sclafani, *Massachusetts Municipal Association*, 2016
- Marcis Kempe, *MassDEP Designee*, 2017

Wayne Southworth, *MassDEP's Designee*, resigned from the Committee in 2017. Wayne was a founding member of the Committee and was instrumental in developing and maintaining a successful Assessment Program. MassDEP and the Committee thank Wayne for his 25 years of leadership and service.

Enclosure: Summary of Accomplishments Supported by the SDWA Assessment in 2017.

**Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS DIRECTLY SUPPORTED BY THE
SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2017**



Protect Public Health through Compliance Reviews

- Reviewed 339 water quality monitoring waiver applications for 822 drinking water sources and issued 211 volatile organic compound waivers; 552 synthetic organic compound waivers; 495 inorganic compound waivers; and 487 perchlorate waivers. This program will save consumers \$4,712,914 in water quality monitoring costs for the 2017-2019 cycle.
- Approved watershed protection programs for 29 reservoirs with disinfection log credit.
- Approved watershed protection programs for 9 reservoirs with filtration waivers.
- Maintained an incentive program for developing local watershed protection plans & bylaws.
- Reviewed and approved wellhead protection land use controls for 10 wells in 8 municipalities.
- Registered 7 existing public water systems (PWSs) that were previously unregulated.
- Reviewed and/or approved 33 new large capacity public water sources.
- Reviewed and approved Cross Connection Control Plans for 7 non-community PWSs.
- Sent 299 Cross Connection Surveyors/Testers Certification reminder letters.
- Issued 266 Cross Connection Surveyors/Testers Certificates.
- Reviewed and approved 4 new technologies for use with drinking water.
- Entered 137 permit applications into MassDEP's permit management system.
- Conducted 431 sanitary surveys which included technical and compliance assistance.



Save Money for Consumers with Compliance Assistance

- Provided technical assistance to K-12 schools, early education and care facilities, Boards of Health, Plumbing Inspectors, PWSs and the public on lead and copper in drinking water.
- Continued to implement the Wellhead Protection Program to provide compliance and technical assistance. Assisted 70 municipalities or PWSs with wellhead protection issues.
- Field verified 12 watershed and/or tributary delineations for reservoirs and updated Geographic Information System (GIS) maps.
- Continued technical support of the bulk upload tool for laboratories to submit drinking water quality sampling results on-line.
- Continued with compliance assistance for Statistical Reporting, Ground Water under the Influence, Consumer Confidence, Cross Connection, Certified Operator and Source Water Protection programs.
- Captured the 8th year of electronic Annual Statistical Reporting (eASR).
- Continued improving the eASR for the next reporting year.
- Provided over 450 instances of Source Water Protection technical assistance at reservoirs and river sources.

- Continued biweekly Program Director emails to notify PWSs of new educational materials, regulatory rules, trainings, etc.
- Maintained an on-line template for PWSs to use for Consumer Confidence Report (CCR) compliance, updated support materials and emailed CCR reminder e-postcards.
- Used an electronic document search for transient non-community CCRs.
- Notified new community water systems of CCR requirements for 2017.
- Reviewed 516 CCRs, provided Technical Assistance Reports and tracked CCR compliance.
- Posted sample schedules and Certificates of Registration for all PWSs.
- Provided compliance assistance to PWSs for the Unregulated Contaminant Monitoring Rule.



Support Public Water Suppliers with Technical Assistance and Training

- Distributed fact sheets, guidance documents, and other technical assistance materials.
- Continued to improve web pages for access by PWSs, town officials, the public and others.
- Provided materials for statewide Board of Health workshops as requested.
- Prepared biennial mailing to all Boards of Health to support their role in protecting drinking water and to update them on drinking water issues.
- Conducted Source Water Protection presentations to regional water works organizations.
- Worked with the Office of the State Geologist and United States Geological Survey on geological studies relative to ground water.
- Presented 56 awards to PWSs during Drinking Water Day in May 2017.
- The Board of Certification of Operators of Drinking Water Supply Facilities approved 52 training courses. This is a short list of new topics:
 - Water Supply for Young Professionals;
 - Regulations;
 - Chlorine: Gas, Liquid & Powder;
 - Disaster Management for Water & Wastewater Utilities;
 - Dam Inspections from Start to Finish;
 - Water, Public Health and Healthcare Coordination Workshop;
 - Rehabilitation Technology for Water Infrastructure;
 - AWWA M36 - Water Audit Methodologies Training;
 - Locating Pipes Using Electromagnetic Technology; and
 - Cyanobacteria-Monitoring & Treating Drinking Water.
- Provided instructors for 6 New England Water Works Association (NEWWA) Backflow Tester and Cross Connection Survey classes.
- Provided Cross Connection Program technical assistance to 189 individuals and municipalities.
- Created new online training videos for PWSs at <https://goo.gl/Xhw4br>.
- Maintained a Drinking Water Program Training Calendar which provides information on courses, workshops and conferences from MassDEP and other sources. PWSs and others can download the calendar and receive automatic updates.

**Massachusetts Department of Environmental Protection
ACCOMPLISHMENTS PARTLY/INDIRECTLY SUPPORTED BY THE
SAFE DRINKING WATER ACT ASSESSMENT
January 1 through December 31, 2017**



Protect Public Health through Compliance Reviews

- Conducted inspections at 6 public surface water systems that have waivers from filtration.
- Conducted regular meetings with the Massachusetts Water Resources Authority including compliance reviews of monthly reports.
- Conducted regular meetings of the Drinking Water Filtration/Treatment Committee.
- Conducted 16 Capacity Reviews for Drinking Water State Revolving Fund applicants.
- Reviewed 2 Water Supply Business Plans during the New Source Approval Process.



Save Money for Consumers with Compliance Assistance

- Continued to offer free training programs for small system operators through an EPA grant.
- Continued the implementation of the Capacity Development Program which provides financial, managerial, and technical assistance to small PWSs.
- Reviewed the technical, financial, and managerial operations of 221 community and non-transient non-community and 179 transient non-community PWSs.
- Reviewed Underground Injection Control (UIC) registration applications for 6 PWSs.
- Responded to requests from PWSs regarding the Unregulated Contaminant Monitoring Rule 3 (UCMR3) Program and the Inorganics Program.
- Helped PWSs write watershed protection plans & local water supply bylaws.
- Submitted the Annual Operator Certification Report to EPA.
- Gave 4 Boards of Health one-on-one assistance with well drilling requirements.
- Continued implementation work for 90 PWSs under the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Prepared LT2 PWSs for second round of source water monitoring.
- Identified 1,336 technical, financial, and managerial deficiencies during sanitary surveys.



Support PWSs with Technical Assistance and Training

- Provided comments on MassDEP Bureau of Waste Site Cleanup, Title 5, and Groundwater Discharge Program regulations & policy development for consistency with the Drinking Water Program.
- Provided technical expertise to the United States Geological Survey on their Climate Response Network.
- Collaborated with the USGS to measure monthly water level readings throughout the state.
- Provided speakers on water supply topics for local and regional events and for operator training courses through NEWWA and the Massachusetts Rural Water Association.

- Continued to collaborate with the Mass. Department of Public Health (DPH) on the Lead Contamination Control Act and fluoridation.
- Provided classroom training on fluoride to PWSs.
- Revised MassDEP Private Well Guidelines and Model Board of Health regulation with the assistance of technical committee consisting of Board of Health agents and well drillers.
- Provided assistance on writing capital improvement plans to 125 PWSs during sanitary surveys.
- Updated records and added new wells totaling 5,000 entries in the Well Driller database.
- Provided technical assistance and instructors to the New England Interstate Water Pollution Control Commission's Soil Evaluator Course.
- Provided technical assistance to the National Science Foundation (NSF) Drinking Water Technology Review Section. Completed review and approval of NSF 419 – A National Standard for Membrane Filtration - at NSF headquarters.



Participate on Committees that Bring Massachusetts Interests to the State, Regional and National Levels

- MassDEP staff participated in meetings and events of the following committees, organizations, and other state, regional and national entities: Association of State Drinking Water Administrators; State Vegetation Management Panel; State Pesticide Board; Office of the State Geologist State Map Advisory Committee; NEWWA Source Water Advisory Group, Groundwater Advisory Committee, Groundwater Resource Initiative, Drinking Water Operators Certification Committee, Board of Certification of Backflow Prevention & Cross Connection Control, Management & Finance; Multi-Agency Task Force on Schools; National Drinking Water Advisory Council Small Systems Implementation Work Group; MassDEP Laboratory Advisory Committee; New England Interstate Water Pollution Control Commission Source Water Protection Work Group; Ground Water Protection Council's Source Water Protection Work Group; Well Driller Certification Program Technical Advisory Committee; AWWA Fluoride Standards Committee. Participated on EPA work groups for Emergency Preparedness, Data Sharing, Lead and Copper Rule, Perchlorate, and the Ground Water Rule.